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Twenty Years in the Careers of Immigrant and Native-born Workers

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.	not available for any reference period
..	not available for a specific reference period
...	not applicable
0	true zero or a value rounded to zero
0^s	value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
^{p}	preliminary
^{r}	revised
x	suppressed to meet the confidentiality requirements of the *Statistics Act*
^{E}	use with caution
F	too unreliable to be published
*	significantly different from reference category ($p < 0.05$)

Twenty Years in the Careers of Immigrant and Native-born Workers

by René Morissette and Rizwan Sultan

This article addresses three questions: (1) What were the employment dynamics of a specific cohort of immigrant and native-born workers over the 20 years from 1991 to 2010? (2) To what extent did initial differences in earnings and pension coverage between the two groups narrow during this period? (3) Which factors were associated with the narrowing of these differences? The data are from the linked 1991 Census–Longitudinal Worker File and pertain to real annual wages and salaries, and pension coverage of immigrants aged 25 to 34, in 1991, who arrived in Canada from 1985 to 1990, and native-born workers of the same age group.[1]

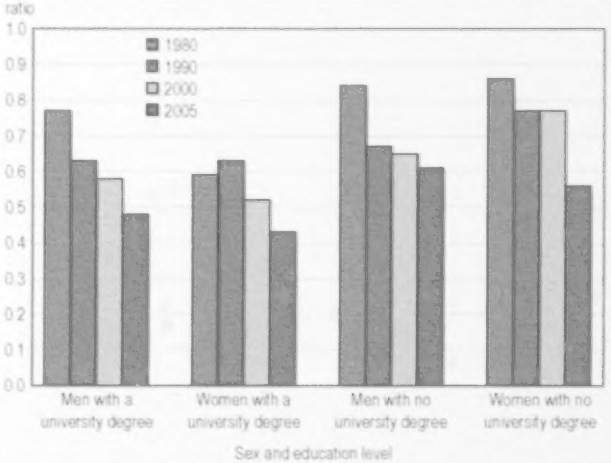
From the early 1980s to the mid-2000s, earnings differences between recent immigrant and native-born workers have widened substantially (Statistics Canada, 2008) (Chart 1). This widening gap raises the question of whether earnings of the two groups eventually converge in the long-term. Despite substantial research on immigrant/native-born earnings differences, no study has followed immigrant and native-born workers individually over a 20-year period to identify factors associated with earnings convergence over the long-term. To shed light on this issue, this article examines the individual employment and wage trajectories of a specific cohort of young immigrants and their native-born counterparts over the 1991-to-2010 period. It shows how real annual wages and salaries and pension coverage of both groups evolved over that 20-year period, and the role that various job characteristics played in this convergence.

The typical immigrant employee had four different employers from 1991 to 2010

Immigrants who were aged 25 to 34 in 1991 and who had arrived in Canada from 1985 to 1990 were less likely than their native-born counterparts to have paid employment throughout the 1991-to-2010 period. Among those who had paid jobs in both 1991 and 2010 (hereafter, 'employees' or 'workers'), 64% of immigrant men and 59% of immigrant women had paid employment in each year from 1991 to 2010. The corresponding figures for native-born men and women in the same age range were higher, at 79% and 71%, respectively.

Even though—or perhaps because—they were less likely to have paid work every year throughout the period, immigrants changed employers more often than native-born employees because of layoffs, quits or other reasons. Immigrant men and women averaged 4.8 and 5.0 employers, respectively, versus 4.4 and 4.3 for their native-born counterparts. The median number of employers for immigrants was 4, compared with 3 for native-born employees.

Chart 1
Recent immigrant-to-Canadian-born earnings ratio, by sex and education level, 1980 to 2005



Note: The numbers refer to all earners aged 25 to 54, whether or not they worked on a full-time basis for a full year. Individuals with self-employment income are included. For 1980 (for 2005), recent immigrants are those who arrived during the five-year period between 1975 and 1979 (between 2000 and 2004).
Source: Statistics Canada. 2008. *Earnings and Incomes of Canadians Over the Past Quarter Century. 2006 Census: Findings*. Ottawa: Statistics Canada. p. 22.

1. Wages are expressed in 2010 dollars. To identify job characteristics (for example, firm size, industry of employment) that contributed to immigrant/native-born earnings convergence over the 1991-to-2010 period, the sample consists only of individuals who had positive wages and salaries in both 1991 and 2010.

The fact that immigrants were less likely than native-born employees to be employed in large firms at the beginning of the period may be one reason why they changed employers more often. In 1991, 30% of immigrant men and 43% of immigrant women were in firms with 500 or more workers. The corresponding percentages for native-born men and women were higher, at 50% and 53%, respectively. Because wages, pension coverage, job security, and opportunities to move up the earnings ladder within the organization are often better in large firms, worker turnover is generally lower than in small firms (Morissette et al., 2013).

Partial convergence in earnings and pension coverage

Both immigrant and native-born workers experienced substantial growth in annual real wages and salaries from 1991 to 2010. For instance, in 2010 when they were aged 44 to 53, members of this cohort of male immigrant employees earned, on average, $60,330 a year, 1.71 times what they had earned in 1991 ($35,290) (Table 1). The corresponding amounts for native-born male employees were $70,210 and $46,410, respectively, an increase of over 51%. The net result was a partial convergence in relative earnings. The average annual wages and salaries of immigrant men were 86% of those of native-born men in 2010, up from 76% in 1991.[2]

Nevertheless, the earnings gap did not narrow steadily throughout the 20-year-period. From 1991 to the early 2000s, the annual wages and salaries of immigrant men in this cohort rose relative to those of native-born men (Chart 2). However, convergence stalled around 2001, and, from 2003 on, immigrant men lost some ground relative to their native-born counterparts.

The partial earnings convergence took place as immigrant men increased their presence in large firms to a greater extent than native-born men. In 2010, 39% of male immigrant employees were in firms with 500 or more workers, up from 30% in 1991. By contrast, about one-half of native-born male employees were in large firms in both 1991 and 2010. Immigrant men's growing presence in large firms, combined with the stable percentage of native-born men in such firms, accounted for between one-quarter and one-third of the narrowing of the earnings gap between the two groups.[3] Other factors (for instance, differential employment movements across narrowly defined industries and occupations, and differential improvements in language skills and social networks) that may underlie the partial earnings convergence cannot be measured with existing data.[4]

The earnings of immigrant and native-born women also partially converged. Average annual wages and salaries of immigrant women were 93% of those of native-born women in 2010, up from 78% in 1991. While immigrant women's presence in large firms increased, so did that of native-born women. As a result, differential movements in employment across firm sizes accounted for a relatively small portion—3% at most—of the earnings convergence among women.

Table 1
Average annual real wages and salaries of immigrant and native-born workers, by sex and level of education, 1991 and 2010

	Men		Women	
	Immigrants	Native-born	Immigrants	Native-born
	2010 dollars			
All workers				
1991	35,290	46,410	23,740	30,340
2010	60,330	70,210	46,450	49,870
Less-educated workers				
1991	29,670	42,480	20,190	24,850
2010	46,600	60,140	38,610	40,680
More-educated workers				
1991	44,580	53,900	29,220	37,370
2010	83,060	89,420	58,560	61,620

Note: The immigrant workers were aged 25 to 34 in 1991 and had arrived in Canada between 1985 and 1990; the native-born workers were aged 25 to 34 in 1991. The analysis pertains to those with positive wages and salaries in both 1991 and 2010. Less-educated workers are those with a trades certificate or diploma, a high school diploma, or less education. More-educated workers have higher levels of educational attainment.
Source: Statistics Canada, authors' calculations.

Chart 2
Average annual real wages and salaries of immigrants relative to native-born workers, by sex, 1991 to 2010

Note: The immigrant workers were aged 25 to 34 in 1991 and arrived in Canada between 1985 and 1990; the native-born workers were aged 25 to 34 in 1991. The analysis pertains to those with positive wages and salaries in both 1991 and 2010. Calculations of wages and salaries for other years (for example, 1992) are based on the subset of those individuals who had positive wages and salaries during the other years.
Source: Statistics Canada, authors' calculations.

2. This partial convergence is consistent with Picot and Piraino (2012), who tracked the annual earnings of immigrant men who arrived in Canada between 1985 and 1989, at the ages of 25 to 44, and the earnings of a comparison group (native-born workers and immigrants who arrived in Canada before 1980). From 1990 to 2005, earnings differences between the two groups narrowed, falling from 30.2% to 14.8%. Unlike the current study, Picot and Piraino (2012) did not assess earnings convergence by education level or convergence in pension coverage.
3. This finding is from regression analyses that control for firm size, broad industrial groups, union status, and regions.
4. Narrowly defined industries can be identified in the data set used for this study, but the relatively small sample sizes for immigrant employees preclude reliable analyses at a detailed level of industry disaggregation.

For immigrant employees of both sexes, partial earnings convergence was observed among both less-educated (those with a trades certificate, a high school diploma, or less education) and more-educated workers (Table 1). By 2010, regardless of their level of education, immigrant women's earnings were roughly 95% of those of their native-born counterparts. For men, the extent of convergence differed by education level. In 2010, less-educated male immigrants' earnings were 78% of those of their native-born counterparts, compared with 93% for more-educated immigrant workers.

Along with relative earnings, differences in pension coverage narrowed during the 1991-to-2010 period. For example, in 2010, 44% of immigrant men had a registered pension plan (RPP) or a deferred profit-sharing plan (DPSP), compared with 56% for their native-born counterparts (Chart 3). Two decades earlier, the figures had been 25% and 50%, respectively.

Multivariate analyses show that, as with relative earnings, the partial convergence of the RPP–DPSP coverage rates among men resulted partly from differential employment movements across firm sizes, which accounted for between roughly one-fifth and one-third of the narrowing of the gap. For women, such movements accounted for one-tenth to one-quarter of the reduction in the difference in RPP–DPSP coverage.

Regardless of their level of education, immigrant employees of both sexes increased their RPP or DPSP coverage faster than native-born employees (Table 2). As a result, coverage rates converged during the period, although not fully.[5]

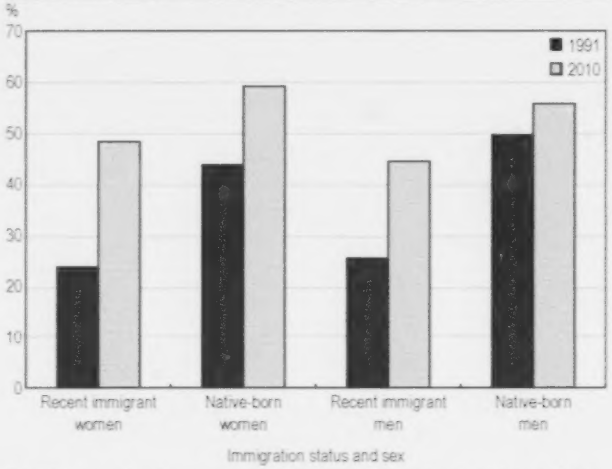
Cumulative earnings correlated with worker mobility

By the end of the 20-year period, the cumulative wages and salaries of male immigrant employees in this cohort averaged $974,900 (2010 dollars), which was 17% lower than what their native-born counterparts earned ($1,173,900). The amounts for women were $676,400 and $778,300, respectively, a difference of 13%.[6]

As expected, cumulative earnings were positively associated with workers' education. When language skills (self-reported ability to sustain a conversation in one or both of the official languages) and region of residence in 1991 were taken into account, immigrant men who entered Canada with at least a bachelor's degree earned, on average, $664,500 more during the period from 1991 to 2010 period than their counterparts with a high school diploma. Immigrant women with a university degree earned $290,150 more, on average, than those with a high school diploma.

Cumulative earnings were also correlated with worker mobility. When education, language skills and region of residence at the beginning of the period were taken into account, immigrant men who had only one employer during the period earned about $205,000 more than those who had five employers. The corresponding estimate for immigrant women is close to $170,000. However, rather than indicating the impact of staying with one employer, these numbers likely reflect the tendency for people employed in high-wage firms to remain with those firms over a long period.

Chart 3
Percentage of workers with a registered pension plan or a deferred profit sharing plan, 1991 and 2010



Note: The immigrant workers were aged 25 to 34 in 1991 and arrived in Canada between 1985 and 1990; the native-born workers were aged 25 to 34 in 1991. The analysis pertains to those with positive wages and salaries in both 1991 and 2010.
Source: Statistics Canada, authors' calculations.

Table 2
Percentage of workers with a registered pension plan or a deferred profit sharing plan, by sex and level of education, 1991 and 2010

	Men		Women	
	Immigrants	Native-born	Immigrants	Native-born
	percent			
All workers				
1991	25.4	49.5	23.7	43.7
2010	44.4	55.7	48.3	59.1
Less-educated workers				
1991	20.1	45.4	20.1	36.1
2010	38.1	50.8	44.1	52.3
More-educated workers				
1991	34.1	57.3	29.2	53.4
2010	54.7	65.0	54.8	67.8

Note: The immigrant workers were aged 25 to 34 in 1991 and had arrived in Canada between 1985 and 1990; the native-born workers were aged 25 to 34 in 1991. The analysis pertains to those with positive wages and salaries in both 1991 and 2010. Less-educated workers are those with a trades certificate or diploma, a high school diploma, or less education. More-educated workers have higher levels of educational attainment.
Source: Statistics Canada, authors' calculations.

5. Using the Longitudinal Administrative Databank, Ostrovsky and Stark (forthcoming) also find that immigrant versus native born differences in pension coverage tend to narrow over time. However, their data do not allow separate analyses by education level or an assessment of the degree to which differential employment movements across firm sizes account for the partial convergence in pension coverage.
6. Consistent with Table 1, average cumulative earnings of less-educated immigrant men ($793,900) amounted to 77% of those of their native-born counterparts ($1,032,800). By contrast, cumulative earnings of more-educated male immigrants ($1,274,200) amounted to roughly 88% of those received by their native-born counterparts ($1,442,800). For both education levels, average cumulative wages and salaries of immigrant women amounted to roughly 90% of those of native-born women.

Job loss (or the absence thereof) also influenced the cumulative earnings of immigrant men and women in this cohort. Immigrant employees who were permanently laid-off at some point during the 20-year period had lower cumulative earnings than those who did not experience job loss. The cumulative earnings disadvantage associated with job loss varied between about $104,000 for immigrant men and $74,000 for immigrant women.

Summary

The decline in earnings of recent immigrants observed since the early 1980s raises the question of whether wages of immigrant and native-born workers fully converge in the long-term. To shed light on this issue, this study examined the employment and earnings trajectories of a specific cohort of immigrant and native-born workers from 1991 to 2010. The main finding is that while earnings and pension coverage of immigrant and native-born employees partially converged over the 20-year period, significant differences still remained. These results measure convergence at the individual level. Whether the degree of convergence in earnings and pension coverage that is achieved over a long period differs when convergence is defined at the family level is a question for future research.

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This article in the *Economic Insights* series is based on research carried out by the Social Analysis Division. For more information, see:

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